-12-

In the Claims

Please cancel Claims 1-45 and 51-75. Claims 46-49 have been amended and are presented below in amended form, and Claims 78-214 have been added. In accordance with 37 C.F.R. § 1.121(c)(1)(ii), amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (page xi and xii).

- 46. (Amended) A method of modulating a GPR-9-6 function comprising contacting a cell that expresses a mammalian GPR-9-6 with an agent which binds thereto, thereby modulating the function of said mammalian GPR-9-6.
- 47. (Amended) The method of Claim 46 wherein said agent can inhibit a function of said manunalian GPR-9-6.
- 43. (Amended) The method of Claim 47 wherein said agent is an antibody which binds a mammalian GPR-9-6 or antigen-binding fragment thereof.
- 49. (Amended) The method of Claim 48 wherein said function is selected from the group consisting of ligand binding, signalling activity and cellular response function.
- 78. (New) The method of Claim 49 wherein said signalling activity is ligand-induced Ca²¹ flux and said cellular response function is ligand-induced chemotaxis.
- (New) The method of Claim 48 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.
 - 80. (New) The method of Claim 48 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).

a19

JAN-17-2002 THU 05:33 PM

- 81. (New) The method of Claim 48 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. IIB-12653).
- 82. (New) The method of Claim 48 wherein the binding of said antibody or antigenbinding fragment to said mammalian GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).
- 83. (New) The method of Claim 48 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).
- 84. (New) The method of Claim 47 wherein said function is selected from the group consisting of ligand binding, ligand-induced chemotaxis and ligand-induced Ca2+ flux.
- 85. (New) The method of Claim 84 wherein said ligand is TECK.
- (New) The method of Claim 84 wherein said agent is an organic compound. 86,
- 87. (New) The method of Claim 84 wherein said agent is a peptide.
- 88. (New) The method of Claim 84 wherein said agent is a nucleic acid.
- 89. (New) The method of Claim 46 wherein said agent can promote a function of GPR-9-6.
- 90, (New) The method of Claim 89 wherein said function is selected from the group consisting of agent-induced chemotaxis and agent-induced Ca21 flux.
- 91. (New) The method of Claim 90 wherein said agent is an organic compound.
- 92. (New) The method of Claim 90 wherein said agent is a polypeptide.

-14-

- 93. (New) The method of Claim 90 wherein said agent comprises TECK or a GPR-9-6-binding variant thereof.
- 94. (New) The method of Claim 90 wherein said agent is a chemokine.
- 95. (New) The method of Claim 94 wherein said chemokine is TECK.
- 96. (New) The method of Claim 90 wherein said agent is an antibody which bind a mammalian GPR-9-6 or antigen-binding fragment thereof.
- 97. (New) The method of Claim 90 wherein said agent is a peptide.
- 98. (New) The method of Claim 90 wherein said agent is a nucleic acid.
- 99. (New) The method of Claim 46 wherein said mammalian GPR-9-6 is a human GPR-9-6.
- 100. (New) The method of Claim 46 wherein said mammalian GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 101. (New) The method of Claim 46 wherein said cell is a recombinant cell.
- 102. (New) The method of Claim 46 wherein said cell is a cell line.
- Q (Q 103. (New) The method of Claim 102 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.
 - 104. (New) The method of Claim 46 wherein said cell is a primary cell.
 - 105. (New) The method of Claim 104 wherein said primary cell is a T cell.

-15-

- 106. (New) The method of Claim 46 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vitro*.
- 1.07. (New) The method of Claim 46 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vivo*.
- 108. (New) A method of modulating a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an agent which binds thereto and modulates a function of said GPR-9-6 selected from the group consisting of ligand binding, signalling activity and cellular response function wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90 % similar to the amino acid sequence of SEQ ID NO:2.
- 109. (New) The method of Claim 108 wherein said ligand is TECK.

ar q

- 110. (New) The method of Claim 108 wherein said agent is an organic compound.
- 111. (New) The method of Claim 108 wherein said agent is an antibody or antigen-binding fragment thereof which binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6.
- 112. (New) The method of Claim 111 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.
- 113. (New) The method of Claim 111 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).

-16-

- 114. (New) The method of Claim 111 wherein the binding of said antibody or antigenbinding fragment to said GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).
- 115. (New) The method of Claim 108 wherein said agent is a poptide.
- 116. (New) The method of Claim 108 wherein said agent is a nucleic acid.
- 117. (New) The method of Claim 108 wherein said GPR-9-6 is a human GPR-9-6.
- 118. (New) The method of Claim 108 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 119. (New) The method of Claim 108 wherein said cell is a recombinant cell.
- 120. (New) The method of Claim 108 wherein said cell is a cell line.
- 121. (New) The method of Claim 120 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
- 122. (New) The method of Claim 108 wherein said cell is a primary cell.
- 123. (New) The method of Claim 122 wherein said primary cell is a T cell.
- 124. (New) The method of Claim 108 wherein said agent inhibits a function of said GPR-9-6.

-17-

- 125. (New) The method of Claim 124 wherein the function is selected from the group consisting of ligand binding, signalling activity and cellular response function, wherein said signalling activity is ligand-induced Ca²⁺ flux and said cellular response function is ligand-induced chemotaxis.
- 126. (New) The method of Claim 108 wherein said agent promotes a function of said GPR-9-6.
- 127. (New) The method of Claim 126 wherein said function is selected from the group consisting of ligand binding, ligand-induced chemotaxis and ligand-induced Ca²¹ flux.
- 128. (New) The method of Claim 108 wherein said cell that expresses GPR-9-6 is contacted with said agent in vitro.
- 129. (New) The method of Claim 108 wherein said cell that expresses GPR-9-6 is contacted with said agent in vivo.
- a19
- 130. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said GPR-9-6.
- 131. (New) The method of Claim 130 wherein said ligand is TECK.
- 132. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.

-18-

- 133. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. IIB-12653).
- 134. (New) The method of Claim 130 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. IIB-12653).
- 135. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTΛ-1470).
- 136. (New) The method of Claim 130 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).
- 137. (New) The method of Claim 130 wherein said mammalian GPR-9-6 is a human GPR-9-6.



- 138. (New) The method of Claim 130 wherein said mammalian GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 139. (New) The method of Claim 130 wherein said cell is a recombinant cell.
- 140. (New) The method of Claim 130 wherein said cell is a cell line.
- 141. (New) The method of Claim 140 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.
- 142. (New) The method of Claim 130 wherein said cell is a primary cell.
- 143. (New) The method of Claim 142 wherein said primary cell is a T cell.

-19-

- 144. (New) The method of Claim 130 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vitro*.
- (New) The method of Claim 130 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vivo*.
- 146. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said GPR-9-6 and inhibits binding of a ligand to said GPR-9-6, wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2.
- 147. (New) The method of Claim 146 wherein said ligand is TECK.
- 148. (New) The method of Claim 146 wherein the binding of said antibody or said antigen-binding fragment to said GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.
- 149. (New) The method of Claim 146 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).
- 150. (New) The method of Claim 146 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).
- 151. (New) The method of Claim 146 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).

-20-

- 152. (New) The method of Claim 146 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).
- 153. (New) The method of Claim 146 wherein said GPR-9-6 is a human GPR-9-6.
- 154. (New) The method of Claim 146 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 155. (New) The method of Claim 146 wherein said cell is a recombinant cell.
- 156. (New) The method of Claim 146 wherein said cell is a cell line.
- 157. (New) The method of Claim 156 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.
- 158. (New) The method of Claim 146 wherein said cell is a primary cell.
- 159. (New) The method of Claim 158 wherein said primary cell is a T cell.
- 160. (New) The method of Claim 146 wherein said cell that expresses GPR-9-6 is contacted with said agent *in vitro*.

- 161. (New) The method of Claim 146 wherein said cell that expresses GPR-9-6 is contacted with said agent in vivo.
- 162. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said

-21-

mammalian GPR-9-6, wherein said antibody or said antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).

- 163. (New) The method of Claim 162 wherein said GPR-9-6 is a human GPR-9-6.
- 164. (New) The method of Claim 162 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 165. (New) The method of Claim 162 wherein said cell is a recombinant cell.
- 166. (New) The method of Claim 162 wherein said cell is a cell line,
- 167. (New) The method of Claim 166 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
- 168. (New) The method of Claim 162 wherein said cell is a primary cell.
- 169. (New) The method of Claim 168 wherein said primary cell is a T cell.
- 170. (New) The method of Claim 162 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.

- 171. (New) The method of Claim 162 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.
- 172. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said

-22-

mammalian GPR-9-6, wherein said antibody or said antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).

- 173. (New) The method of Claim 172 wherein said GPR-9-6 is a human GPR-9-6.
- 174. (New) The method of Claim 172 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 175. (New) The method of Claim 172 wherein said cell is a recombinant cell.
- 176. (Now) The method of Claim 172 wherein said cell is a cell line.
- 177. (New) The method of Claim 176 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
- 1/8. (New) The method of Claim 172 wherein said cell is a primary cell.
- 179. (New) The method of Claim 178 wherein said primary cell is a T cell.
- 180. (New) The method of Claim 172 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.

- 181. (New) The method of Claim 172 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment in vivo.
- 182. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof that binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6,

-23-

wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2; and said antibody or said antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).

- 183. (New) The method of Claim 182 wherein said GPR-9-6 is a human GPR-9-6.
- 184. (New) The method of Claim 182 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 185. (New) The method of Claim 182 wherein said cell is a recombinant cell.
- 186. (New) The method of Claim 182 wherein said cell is a cell line.
- 187. (New) The method of Claim 186 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
- 188. (New) The method of Claim 182 wherein said cell is a primary cell.
- 189. (New) The method of Claim 188 wherein said primary cell is a T cell.
- 190. (New) The method of Claim 182 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.
- 191. (New) The method of Claim 182 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment in vivo.

-24-

192. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof that binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6,

wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2; and

said antibody or said antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).

- 193. (New) The method of Claim 192 wherein said GPR-9-6 is a human GPR-9-6.
- 194. (New) The method of Claim 192 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
- 195. (New) The method of Claim 192 wherein said cell is a recombinant cell.
- 196. (New) The method of Claim 192 wherein said cell is a cell line.
- 197. (New) The method of Claim 196 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
- 198. (New) The method of Claim 192 wherein said cell is a primary cell.

- 199. (New) The method of Claim 198 wherein said primary cell is a T cell.
- 200. (New) The method of Claim 192 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.
- 201. (New) The method of Claim 192 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.

-25-

- 202. (New) A method of modulating a function of GPR-9-6 comprising combining a cell that expresses mammalian GPR-9-6; a ligand of said mammalian GPR-9-6; and an agent which binds said ligand and modulates binding of said ligand to said mammalian GPR-9-6, whereby a function of said mammalian GPR-9-6 is modulated.
- 203. (New) The method of Claim 202 wherein said function is selected from the group consisting of ligand binding, signalling activity and cellular response function.
- 204. (New) The method of Claim 202 wherein said ligand is TECK.
- 205. (New) The method of Claim 202 wherein said agent inhibits binding of said ligand to said mammalian GPR-9-6.

- 206. (New) The method of Claim 205 wherein said agent is an antibody or antigen-binding fragment that binds TECK.
- 207. (New) The method of Claim 206 wherein the binding of said antibody or antigen-binding fragment to TECK can be inhibited by mAb 16.3.1 (ATCC Accession No. PTA-1468).
- 208. (New) The method of Claim 206 wherein said antibody or antigen binding fragment has the epitopic specificity of mAb 16.3.1 (ATCC Accession No. PTA-1468).
- 209. (New) The method of Claim 206 wherein the binding of said antibody or antigen-binding fragment to said TECK can be inhibited by mAb 11.3.1 (ATCC Accession No. PTA-1469).